IN THE CLAIMS

Please amend the claims as follows:

1. (original) In a media signal processing system, a method of processing a media signal available in the form of successive sets of media data packets, said processing method performing one or a plurality of functions among which at least one of them can be carried out with different levels of scalability resulting in different output qualities and resource demands, said method further comprising the steps of :

- requesting a resource to provide a plurality of system outputs ;

- allocating a predetermined budget to the method in order to enable operating the method at a given level of scalability ;

- measuring a so-called progress that takes into account the data that have been processed ;

- measuring at least one media processing specific resource used during operation of the method ;

- on the basis of regulation parameters consisting of said allocated budget and said measurements, performing a load regulation by allocating modified resources for media signal processing.

2.   (original)   A method according to claim 1, in which said regulation parameters are adapted within a frame with regular borders.

3.   (original)   A method according to claim 1, in which said regulation parameters are adapted within a frame subdivided into segments in a regular grid, a separate budget being allocated to at least one of said segments.

4.   (original)   A method according to claim 1, in which said regulation parameters are adapted within a frame subdivided into segments in a regular grid, a separate budget being allocated to each of said segments on the basis of content dependent segment properties.

5.   (original)   A method according to claim 1, in which said regulation parameters are adapted within a frame subdivided into irregular parts, a specific budget being allocated to each of said irregular parts.

6.   (original)   A media signal processing system for processing successive sets of video data packets and comprising one or a plurality of functional circuits among which at least one of the

functions performed by said circuits can be carried out with different levels of scalability resulting in different output qualities and resource demands, said system comprising a regulation device consisting of a feedback control loop provided for dynamically changing the resource needs of the system as a function of a so-called deviation applied to at least one variable parameter of said scalable(s) function(s) and calculated by means of a computation of the difference between expected and real usage during an assigned period.

7. (original) Application of the media signal processing method of claim 1 to a load regulation method for use in a resource-scalable motion estimator testing a target number of vector candidates and including a load-balancing regulation for an input video data stream consisting of successive frames that comprise successive lines of pixels and are subdivided into contiguous blocks, said load regulation method comprising the steps of :

- requesting a resource to provide a plurality of system outputs in the form of a given number of estimated motion vector candidates ;

- allocating a predetermined budget per frame in order to enable operating at a defined quality level ;

- measuring a so-called progress that takes into account the data that have been processed;

- measuring the resource used during operation of the method ;

- on the basis of regulation parameters consisting of said allocated budget and said measurements, performing a load regulation by allocating modified resources for said media signal processing.

8. (original) A load regulation method according to claim 7, for use in a resource-scalable motion estimator testing a target number of vector candidates and including a load-balancing regulation for an input video data stream consisting of successive frames that comprise successive lines of pixels and are subdivided into contiguous blocks, said load regulation method comprising the steps of :

- estimating a given number of estimated motion vector candidates ;

- allocating a predetermined budget per frame to enable operating at a defined quality level ;

- measuring a so-called progress taking into account the data that has been processed;

- weighting the target number of vector candidates with said progress ;

- determining the difference between the given number of vector candidates at the output of the motion estimator and the weighted target number of vector candidates ;

- performing a regulation of the load of said motion estimator on the basis of said difference and said measurement.

9. (original) A method according to claim 8, in which said progress is determined by a ratio between a number of processed block lines and the total number of block lines in a frame.

10. (original) A method according to claim 9, in which said regulation parameter is a block-hopping threshold affecting the number of vector candidates to be tested.

11. (currently amended) A computer system for performing a method according to ~~anyone of claims 8 to 10~~claim 8 .

12. (currently amended) A computer program product comprising program code means stored on a computer readable medium for performing a method according to ~~anyone of claims 8 to 10~~claim 8 when the computer program is run on a computer.

13. (original) A resource-scalable motion estimator provided for testing a target number of vector candidates associated to a video data stream consisting of frames that comprise successive lines of pixels and are subdivided into contiguous blocks, said motion estimator comprising :

- motion estimating means, provided for delivering a given number of vector

candidates ;

- allocating means, provided for defining a predetermined budget per frame to enable operating at a defined quality level ;

- measuring means, provided for calculating a so-called progress determined by a ratio between a number of processed block lines and the total number of blocks lines in a frame ;

- weighting means, provided for weighting the target number of vector candidates with said progress ;

- computing means, provided for determining the difference between the real number of vector candidates at the output of the motion estimator and the weighted target number of vector candidates ;

- control means, provided for changing a regulation parameter of the load of the motion estimator on the basis of said difference.

14. (original) A motion estimator according to claim 13, in which said regulation parameter is a block-hopping threshold affecting the number of vector candidates to be tested.

15. (original) Application of the media processing method of claim 1 to a load regulation method for use in a sharpness enhancement process, said load regulation method comprising the steps of :

- requesting a resource to provide a plurality of system outputs in the form of a given number of block activities and associated decisions ;

- allocating a predetermined budget per frame in order to enable operating at a defined quality level ;

- measuring a so-called progress that takes into account the data that have been processed ;

- measuring the resource used during operation of the method ;

- on the basis of regulation parameters consisting of said allocated budget and said measurements, performing a load regulation by allocating modified resources for said media signal processing.

16. (original) A sharpness enhancement device for carrying out the method according to claim 15.